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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/065,807 | 11/21/2002 | Shigefumi Odaohhara | JP920010333U | 7978 |
| 53493 | 7590 | 03/10/2006 | EXAMINER | |
| LENOVO (US) IP Law Mail Stop ZHHA/B675/PO Box 12195 3039 Cornwallis Road RTP, NC 27709-2195 | | | LUK, LAWRENCE W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2187 | |
| DATE MAILED: 03/10/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|----------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/065,807 | ODAOHHARA, SHIGEFUMI | |
| | Examiner | Art Unit | |
| | Lawrence W. Luk | 2187 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 16, 18 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-15 and 19-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 16, 18 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application No. 10/065,807 has a total of 11 claims pending in the application; there are 4 independent claims and 7 dependent claims, all of which are rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 16, 18, 23, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanigawa (6,083,369).

Claim 1

As to claim 1, Tanigawa disclose in figure 1, apparatus comprising: a body **(heater 1)** which consumes power; a battery **(2)** which supplies power to the body **(1)** through a power line by discharging after being charged; a high-capacitor capacitor **(3, double layer capacitor, see column13, line 40)** connected to the power line in parallel with the battery **(2) (see column 13, lines 35-36)**; a switch **(7)** for disconnecting or connecting the high-capacity capacitor **(3)** from or to the power line by a circuit **(5)**, said switch **(7)** combination with said high-capacity capacitor **(3)** and said series combination of said switch **(7)** and said high-capacity capacitor **(3)** being coupled in parallel with said battery **(2)**; and controller **(5)** for controlling operations of the switch **(7)**. **(see column 5, lines 33-41)**.

Claim 2

As to claim 2, Tanigawa disclose in figure 1, the controller (5) controls operations of the switch (7) to disconnect the high-capacity capacitor (3) by a circuit when the battery (2) is disconnected from the body (1). (see figure 1, column 4, lines 4-11).

Claim 3

As to claim 3, Tanigawa disclose in figure 10 and 12, the controller (5) controls operations of the switch (9) to disconnect the high-capacity capacitor (8) by a circuit when the body is powered off and/or the body is kept in a small-power-consumption mode (see figure 10 & 12, column 22, lines 14-32).

Claim 4

As to claim 4, Tanigawa disclose in figure 8, wherein the high capacity capacitor (8) and the switch (9) are integrated so that they can be set to the body (see figure 8, column 21, lines 1-10).

Claim 23

As to claim 23, Tanigawa disclose in figure 9, apparatus comprising: a body which consumes power; a battery (2) which supplies power to the body through a power line by discharging after being charged; a switch (9); a high-capacity capacitor (8) coupled in series with said switch (9) to the power line, the series combination of said switch (9) and said high-capacity capacitor (8) being coupled in parallel with the battery (2); wherein the switch (9) couples and decouples said high-capacity capacitor (8) from and to the power line, and a controller (5) for controlling operations of the switch (9) and

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which acts to conditionally decouple the high-capacity capacitor (8) from the power line (see figure 9, column 21, lines 41-67).

Claim 24

As to claim 24, Tanigawa disclose in figure 9, wherein the controller (5) controls operations of the switch (9) to decouple the high-capacity capacitor (8) in response to the battery (2) being disconnected from the body (1). (see figure 9, column 21, lines 41-67).

Claim 26

As to claim 26, Tanigawa disclose in figure 8, wherein the high capacity capacitor (8) and the switch (9) are integrated so that they can be set to the body (see figure 8, column 21, lines 1-10).

Claim 16

As to claim 16, Tanigawa disclose in Figure 4 & 8, an electrical apparatus comprising; a cell (2) for supplying power though a predetermined power line; a high-capacity capacitor (8) connected to the power line in parallel with the cell (2) under a predetermined condition (see the paragraph bridging column 22 & 23); a switch (9) for disconnecting or connecting the high-capacity capacitor (8) from or to the power line by a circuit said switch (9) in series combination with said high-capacity capacitor (8) and said series combination of said switch (9) and said high-capacity capacitor (8) being coupled in parallel with said cell (2); and a CPU (5) for controlling operations of the switch (9) (see paragraph bridging column 1 & 2).

Claim 18

As to claim 18, Tanigawa disclose in figure 4, 8 , the CPU (5) detects a state in which the cell (2) is not connected to the electrical apparatus or a state in which it is unnecessary to supply a peak power to the electrical apparatus when the cell (2) is set to the electrical apparatus and controls operations of the switch (9) based on a detected state (see column 13, lines 1-32).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 16, 18 and 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Hanada et al. (6,798,175).

Claim 1

As to claim 1, Hanada et al. disclose in figure 2 & 4, apparatus comprising: a body which consumes power; a battery (2) which supplies power to the body through a power line by discharging after being charged (see column 5, lines 29-32); a high-capacitor capacitor (10, double layer capacitor, see column 5, line 50) connected to the power line in parallel with the battery (2) (see column 5, lines 48-51); a switch (20)

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for disconnecting or connecting the high-capacity capacitor (10) from or to the power line by a circuit, said switch (20) combination with said high-capacity capacitor (10) and said series combination of said switch (20) and said high-capacity capacitor (10) being coupled in parallel with said battery (2); and controller (30) for controlling operations of the switch (20). (see figure 2, column 6, lines 1-19)

Claim 2

As to claim 2, Hanada et al. disclose in figure 2 & 4, the controller (30) controls operations of the switch (20) to disconnect the high-capacity capacitor (10) by a circuit when the battery (2) is disconnected from the body (see column 2, lines 13-19).

Claim 3

As to claim 3, Hanada et al. disclose in figure 15, the controller (30) controls operations of the switch (81, 82 and 85) to disconnect the high-capacity capacitor (11) by a circuit when the body is powered off and/or the body is kept in a small-power-consumption mode (see figure 15, column 18, lines 53-60).

Claim 4

As to claim 4, Hanada et al. disclose in figure 3 & 4, wherein the high capacity capacitor (10) and the switch (20) are integrated so that they can be set to the body (see column 6, lines 34-45).

Claim 16

As to claim 16, Tanigawa disclose in Figure 2 & 9, an electrical apparatus comprising; a cell (2) for supplying power through a predetermined power line (see figure 1, column 5, lines 36-39); a high-capacity capacitor (10) connected to the power

line in parallel with the cell (2) under a predetermined condition (**see figure 2, column 5, lines 36-51**); a switch (41, 42) for disconnecting or connecting the high-capacity capacitor (10) from or to the power line by a circuit said switch (41, 42) in series combination with said high-capacity capacitor (10) and said series combination of said switch (41, 42) and said high-capacity capacitor (10) being coupled in parallel with said cell (2); and a CPU (30) for controlling operations of the switch (41, 42) (**see figure 9, column 12, lines 24-41**).

Claim 18

As to claim 18, Hanada et al. disclose in figure 15, the CPU (30) detects a state in which the cell (2) is not connected to the electrical apparatus or a state in which it is unnecessary to supply a peak power to the electrical apparatus when the cell (2) is set to the electrical apparatus and controls operations of the switch (81, 85) based on a detected state (**see figure 15, column 18, lines 53-60**).

Claim 22

As to claim 22, Hanada et al. disclose in figure 9, an electrical apparatus comprising: a cell (2) for supplying power through a predetermined power line (**see column 3, lines 60-65**); a high capacity capacitor (10) connected to the power line in parallel with the cell (2) under a predetermined condition (**see column 5, lines 48-52**); a switch (41, 42) for disconnecting or connecting the high-capacity capacitor (10) from or to the power line by a circuit; said switch (41, 42) in series combination with said high capacity capacitor (10) and said series combination of said switch (41, 42) and said high capacity capacitor (10) being coupled in parallel with said cell (2) ; and a CPU (30) for

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controlling operations of the switch **(41, 42)** (see column 12, lines 24-41); wherein the CPU **(30)** detects a state in which the cell **(2)** is not connected to the electrical apparatus or a state in which it is unnecessary to supply a peak power to the electrical apparatus when the cell **(2)** is set to the electrical apparatus and controls operations of the switch **(41, 42)** based on a detected state (see column 1, lines 57-61).

Claim 23

As to claim 23, Hanada et al. disclose in figure 9, apparatus comprising: a body which consumes power; a battery **(2)** which supplies power to the body through a power line by discharging after being charged; a switch **(41, 42)**; a high-capacity capacitor **(10)** coupled in series with said switch **(41, 42)** to the power line, the series combination of said switch **(41, 42)** and said high-capacity capacitor **(10)** being coupled in parallel with the battery **(2)**; wherein the switch **(41, 42)** couples and decouples said high-capacity capacitor **(10)** from and to the power line, and a controller **(30)** for controlling operations of the switch **(41, 42)** and which acts to conditionally decouple the high-capacity capacitor **(10)** from the power line.

Claim 24

As to claim 24, Hanada et al. disclose in figure 9, wherein the controller **(30)** controls operations of the switch **(41, 42)** to decouple the high-capacity capacitor **(10)** in response to the battery **(2)** being disconnected from the body.

Claim 25

As to claim 25, Hanada et al. disclose in figure 9, wherein the controller **(30)** controls operations of the switch **(41, 42)** to decouple the high-capacitor **(10)** by a

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circuit in response to a reduced power state selected from the group consisting of a state in which the battery (2) is powered off and a state in which the body is kept in a low-power-consumption mode (see column 1, lines 57-61).

Claim 26

As to claim 26, Hanada et al. disclose in figure 4, wherein the high capacity capacitor (10) and the switch (SW1, SW2, SW3) are integrated so that they can be set to the body (see figure 4, column 6, lines 34-45).

6. RELEVANT ART CITED BY THE EXAMINER

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure.

See **MPEP 707.05 (c)**.

The following references teach the switch in series combination with said high-capacity capacitor and parallel with said battery.

| <u>US PATENT NUMBER</u> | <u>FIGURES</u> |
|-------------------------------------|-----------------------|
| 5,642,696 | 5 |
| 5, 932,992 | 12, 14, 15 |
| <u>FOREIGN PATENT NUMBER</u> | <u>FIGURES</u> |
| JP 08227734A | 1 |
| JP 2002035057A | 1 |
| JP 2001292536A | 1 |

Response to Arguments

7. Applicant's arguments with respect to claims 1-4, 16, 18 and 22-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding are (703) 746-7239, (571) 272-2100 for regular communication and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to receptionist whose telephone number is (571) 272-2100.

LWL
March 2, 2006

Lawrence Luk
examiner
3/2/06